

Connecting via Winsock to Dialog

Logging in to Dialog

Trying 31060000009999...Open

DIALOG INFORMATION SERVICES

PLEASE LOGON:

ENTER PASSWORD:

Welcome to DIALOG

Dialog level 02.16.02D

Last logoff: 01jul03 18:05:19

Logon file405 02jul03 11:44:28

*** ANNOUNCEMENT ***

—File 654 - US published applications from March 15, 2001 to the present are now online. Please see HELP NEWS 654 for details.

—File 581 - The 2003 annual reload of Population Demographics is complete. Please see Help News581 for details.

—File 156 - The 2003 annual reload of ToxFile is complete. Please see HELP NEWS156 for details.

—File 990 - NewsRoom now contains February 2003 to current records. File 992 - NewsRoom 2003 archive has been newly created and contains records from January 2003. The oldest month's records roll out of File 990 and into File 992 on the first weekend of each month. To search all 2003 records BEGIN 990, 992, or B NEWS2003, a new OneSearch category.

—Connect Time joins DialUnits as pricing options on Dialog. See HELP CONNECT for information.

—SourceOne patents are now delivered to your email inbox as PDF replacing TIFF delivery. See HELP SOURCE1 for more information.

—Important news for public and academic libraries. See HELP LIBRARY for more information.

—Important Notice to Freelance Authors— See HELP FREELANCE for more information

NEW FILES RELEASED

***World News Connection (File 985)

***Dialog NewsRoom - 2003 Archive (File 992)

***TRADEMARKSCAN-Czech Republic (File 680)

***TRADEMARKSCAN-Hungary (File 681)

***TRADEMARKSCAN-Poland (File 682)

UPDATING RESUMED

RELOADED
***Population Demographics -(File 581)
***CLAIMS Citation (Files 220-222)

REMOVED

>>> Enter BEGIN HOMEBASE for Dialog Announcements <<<
>>> of new databases, price changes, etc. <<<

* * * * See HELP NEWS 225 for information on new search prefixes and display codes

SYSTEM:HOME
Cost is in DialUnits
Menu System II: D2 version 1.7.9 term=ASCII
*** DIALOG HOMEBASE(SM)

Information:

1. Announcements (new files, reloads, etc.)
2. Database, Rates, & Command Descriptions
3. Help in Choosing Databases for Your Topic
4. Customer Services (telephone assistance, training, seminars, etc.)
5. Product Descriptions

Connections:

- 6. DIALOG(R) Document Delivery
- 7. Data Star(R)

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/H = Help /L = Logoff /NOMENU = Command Mode

Enter an option number to view information or to connect to an online service. Enter a BEGIN command plus a file number to search a database (e.g., B1 for ERIC).
? b 410

02Jul03 11:44:29 User268147 Session D98.1
\$0.00 0.149 DialUnits FileHomeBase
\$0.00 Estimated cost FileHomeBase
\$0.00 Estimated cost this search
\$0.00 Estimated total session cost 0.149 DialUnits

File 410:Chronolog(R) 1981-2003/Aug
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Set Items Description

? set hi %%%:set hi %%%

HIGHLIGHT set on as "

HIGHLIGHT set on as

? b 5, 34, 155, 172

02ju103 11:44:40 User268147 Session D98.2

\$0.00 0.071 DialUnits Fi
\$0.00 Estimated cost File410
\$0.04 TELNET
\$0.04 Estimated cost this searc

\$0.04 Estimated total session cost 0.220 DialUnits

SYSTEM:OS - DIALOG OneSearch

File 5:Biosis Previews(R) 1969-2003/Jun W4

(c) 2003 BIOSIS

File 34:SciSearch(R) Cited Ref Sci 1990-2003/Jun W5

(c) 2003 Inst for Sci Info

File 155:MEDLINE(R) 1966-2003/Jun W4

(c) format only 2003 The Dialog Corp.

*File 155: Medline has been reloaded and accession numbers have changed. Please see HELP NEWS 155.

File 172:EMBASE Alert 2003/Jun W5

(c) 2003 Elsevier Science B.V.

Set Items Description

? s "epidermolysis bullosa"

S1 1899 "EPIDERMOLYSIS BULLOSA"

? s cytosine

S2 48128 CYTOSINE

? s 1368

S3 586 1368

? s ?1368?

>>>File 5 processing for ?1368? stopped at ACROLAXUS ORIENTALIS (ORGANISMS

- UNSPECIFIED)

>>>File 34 processing for ?1368? stopped at ADDNRHOK□

>>>File 155 processing for ?1368? stopped at ALLERGOGENI

□

S4 0 ?1368?

? s 1368?

S5 700 1368?

? s laminin

S6 40863 LAMININ

? s s6 and (insert or mutation or mutated or insertion or deletion or substitution)

40863 S6

29972 INSERT

522151 MUTATION

60560 MUTATED

167009 INSERTION

221200 DELETION

206582 SUBSTITUTION

S7 1810 S6 AND (INSERT OR MUTATION OR MUTATED OR INSERTION OR DELETION OR SUBSTITUTION)

? ds

Set Items Description

S1 1899 "EPIDERMOLYSIS BULLOSA"

S2 48128 CYTOSINE

S3 586 1368

S4 0 ?1368?

S5 700 1368?

S6 40863 LAMININ

S7 1810 S6 AND (INSERT OR MUTATION OR MUTATED OR INSERTION OR DELETION OR SUBSTITUTION)

? s s3 or s5

586 S3

700 S5

S8 700 S3 OR S5

? s s1 and s8

1899 S1

700 S8

S9 0 S1 AND S8

12
24
514?

? s s8 and s2
700 S8
48128 S2
S10 0 S8 AND S2

?
PLEASE ENTER A COMMAND OR BE LOGGED OFF IN 5 MINUTES
? s s7 ands1
>>>Term "ANDS1" in invalid position
? s s7 and s1
1810 S7
1899 S1
S11 37 S7 AND S1
? s s11 and cytosine
37 S11
48128 CYTOSINE
S12 1 S11 AND CYTOSINE
? type s12/full/all

12/9/1 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2003 Inst for Sci Info. All rts. reserv.

11469061 Genuine Article#: 654YK Number of References: 22
Title: A mutation in the LAMC2 gene causes the Herlitz junctional
epidermolysis bullosa (H-JEB) in two French draft horse breeds
Author(s): Milenkovic D; Chaffaux S; Taourit S; Guerin G (REPRINT)
Corporate Source: INRA,Ctr Rech Jouy, Dept Genet Anim, Lab Genet Biochim &
CytoGenet,F-78352 Jouy En Josas//France/ (REPRINT); INRA,Ctr Rech Jouy,
Dept Genet Anim, Lab Genet Biochim & CytoGenet,F-78352 Jouy En
Josas//France/
Journal: GENETICS SELECTION EVOLUTION, 2003, V35, N2 (MAR-APR), P249-256
ISSN: 0999-193X Publication date: 20030300
Publisher: E D P SCIENCES, 7, AVE DU HOGGAR, PARC D ACTIVITES COURTABOEUF,
BP 112, F-91944 LES ULIS CEDEXA, FRANCE
Language: English Document Type: ARTICLE
Geographic Location: France
Journal Subject Category: AGRICULTURE, DAIRY & ANIMAL SCIENCE; GENETICS &
HEREDITY
Abstract: Epidermolysis bullosa (EB) is a heterogeneous group of inherited
diseases characterised by skin blistering and fragility. In humans, one
of the most severe forms of EB known as Herlitz-junctional EB (H-JEB),
is caused by mutations in the laminin 5 genes. EB has been
described in several species, like cattle, sheep, dogs, cats and horses
where the mutation, a cytosine insertion in exon 10
of the LAMC2 gene, was very recently identified in Belgian horses as
the mutation responsible for JEB. In this study, the same
mutation was found to be totally associated with the JEB
phenotype in two French draft horse breeds, Trait Breton and Trait
Comtois. This result provides breeders a molecular test to better
manage their breeding strategies by genetic counselling.
Descriptors--Author Keywords: horse ; LAMC2 ; epidermolysis bullosa ;
laminin 5
Identifiers--KeyWord Plus(R): MECHANOBULLOUS DISEASE; CLASSIFICATION;
DIAGNOSIS; POSITION
Cited References:
AUMAILLEY M, 1998, V193, P1, J ANAT 1
BRENNEMAN KA, 2000, V37, P4336, VET PATHOL
BRETHESSEN H, 1935, V48, P258, J COMP PATH THER
BRUCKNER TUDERMA L, 1991, V96, P452, J INVEST DERMATOL
COLOGNATO H, 1999, V9, P1327, CURR BIOL
CROWELL WA, 1976, V168, P56, J AM VET MED ASSOC
DUBIELZIG RR, 1986, V23, P325, VET PATHOL

FINE JD, 2000, V42, P1051, J AM ACAD DERMATOL
FINE JD, 1991, V24, P119, J AM ACAD DERMATOL
FRAME SR, 1988, V193, P1420, J AM VET MED ASSOC
GOUreau JM, 1989, V62, P345, B ACAD VET FR
HOOD J, 2001, V11, P463, TRENDS CELL BIOL
JOHNSON GC, 1998, V99, P329, J COMP PATHOL
KOHN CW, 1989, V21, P297, EQUINE VET J
KORGE BP, 1996, V74, P59, J MOL MED-JMM
LYKKEANDERSEN J, 2001, V293, P1836, SCIENCE
NAGY E, 1998, V23, P198, TRENDS BIOCHEM SCI
OLIVRY T, 1999, V36, P616, VET PATHOL
PALAZZI X, 2000, V115, P135, J INVEST DERMATOL
PULKKINEN L, 1999, V18, P29, MATRIX BIOL
SPIRITO F, 2002, V3, P684, J INVEST DERMATOL
TERWILLIGER JD, 1995, V56, P777, AM J HUM GENET

? s lamc2

S13 201 LAMC2

? ds

Set	Items	Description
S1	1899	"EPIDERMOLYSIS BULLOSA"
S2	48128	CYTOSINE
S3	586	1368
S4	0	?1368?
S5	700	1368?
S6	40863	LAMININ
S7	1810	S6 AND (INSERT OR MUTATION OR MUTATED OR INSERTION OR DELETION OR SUBSTITUTION)
S8	700	S3 OR S5
S9	0	S1 AND S8
S10	0	S8 AND S2
S11	37	S7 AND S1
S12	1	S11 AND CYTOSINE
S13	201	LAMC2
? s s13 and s3		
	201	S13
	586	S3
S14	0	S13 AND S3
? s s13 and s5		
	201	S13
	700	S5
S15	3	S13 AND S5
? type s15/full/all		

15/9/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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13909810 BIOSIS NO.: 200200538631

Animal models for skin blistering conditions: Absence of laminin 5 causes hereditary junctional mechanobullous disease in the Belgian horse.

AUTHOR: Spirito Flavia; Charlesworth Alexandra; Linder Keith; Ortonne Jean-Paul; Baird John; Meneguzzi Guerrino(a)

AUTHOR ADDRESS: (a)INSERM U385, UFR de Medecine, Avenue de Valombrose, 06107, Nice Cedex 2**France E-Mail: meneguzz@unice.fr

JOURNAL: Journal of Investigative Dermatology 119 (3):p684-691 September, 2002

MEDIUM: print

ISSN: 0022-202X

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: Recent achievements in the genetic correction of keratinocytes isolated from patients with junctional epidermolysis bullosa have paved the way to a gene therapy approach for the disease. Because gene therapy protocols require preclinical validation in animals, we have characterized spontaneous animal models of junctional epidermolysis bullosa. In this study we have elucidated the genetic basis of the hereditary junctional mechanobullous disease in the Belgian horse, a condition characterized by blistering of the skin and mouth epithelia, and exungulation (loss of the hoof). Immunofluorescence analysis associated the condition to the absent expression of the gamma2 chain of laminin 5 and designated *Lamc2* as the candidate gene. Comparative analysis of the nucleotide sequence of the full-length gamma2 cDNA isolated by reverse transcription polymerase chain reaction amplification of total RNA purified from the epithelium of a junctional epidermolysis bullosa foal and a healthy control disclosed a homozygous basepair insertion (1368insC) in the affected animal. Mutation 1368insC results in a downstream premature termination codon and is predicted to cause absent expression of the laminin gamma2 polypeptide. Our results also show that: (i) the horse junctional epidermolysis bullosa genetically corresponds to the severe Herlitz form of junctional epidermolysis bullosa in man; (ii) the amino acid sequence and structure of the horse laminin gamma2 chain are virtually identical to the human counterpart; (iii) the moderate eruption of skin blisters in the affected animals with respect to the human Herlitz junctional epidermolysis bullosa patients correlates with the protection provided by hair. Our observations suggest that the affected foals are a convenient source of epithelial cells from tissues that cannot be obtained from human junctional epidermolysis bullosa patients, and imply that hairless strains of animals with recessive skin disorders would be the best models for *in vivo* gene therapy approaches to skin blistering diseases.

DESCRIPTORS:

MAJOR CONCEPTS: Biochemistry and Molecular Biophysics; Integumentary System (Chemical Coordination and Homeostasis)

BIOSYSTEMATIC NAMES: Equidae—Perissodactyla, Mammalia, Vertebrata, Chordata, Animalia

ORGANISMS: horse (Equidae)—animal model, breed-Belgian, foal

ORGANISMS: PARTS ETC: epidermis—integumentary system; hoof—integumentary system; mouth epithelia—dental and oral system

BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): Animals; Chordates; Mammals; Nonhuman Mammals; Nonhuman Vertebrates; Perissodactyls; Vertebrates

DISEASES: epitheliogenesis imperfecta—integumentary system disease; exungulation—integumentary system disease; genodermatosis—integumentary system disease; hereditary junctional mechanobullous disease—genetic disease, integumentary system disease; skin blistering—integumentary system disease

CHEMICALS & BIOCHEMICALS: cDNA {complementary DNA}; laminin 5—absence

CONCEPT CODES:

03506 Genetics and Cytogenetics-Animal

10060 Biochemical Studies-General

10062 Biochemical Studies-Nucleic Acids, Purines and Pyrimidines

18504 Integumentary System-Physiology and Biochemistry

18506 Integumentary System-Pathology

19004 Dental and Oral Biology-Physiology and Biochemistry

BIOSYSTEMATIC CODES:

86145 Equidae

15/9/2 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

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11111016 Genuine Article#: 592RV Number of References: 52

Title: Animal models for skin blistering conditions: Absence of laminin 5 causes hereditary junctional mechanobullous disease in the Belgian horse

Author(s): Spirito F (REPRINT) ; Charlesworth A; Linder K; Ortonne JP; Baird J; Meneguzzi G

Corporate Source: Fac Med,INSERM U385, UFR Med,Ave Valombrose/F-06107 Nice 2//France/ (REPRINT); Fac Med,INSERM U385, UFR Med,F-06107 Nice 2//France/; Univ Guelph,Ontario Vet Coll, Dept Pathobiol,Guelph/ON N1G 2W1/Canada/; Univ Guelph,Ontario Vet Coll, Dept Clin Studies,Guelph/ON N1G 2W1/Canada/

Journal: JOURNAL OF INVESTIGATIVE DERMATOLOGY, 2002, V119, N3 (SEP), P 684-691

ISSN: 0022-202X Publication date: 20020900

Publisher: BLACKWELL PUBLISHING INC, 350 MAIN ST, MELDEN, MA 02148 USA

Language: English Document Type: ARTICLE

Geographic Location: France; Canada

Journal Subject Category: DERMATOLOGY & VENEREAL DISEASES

Abstract: Recent achievements in the genetic correction of keratinocytes isolated from patients with junctional epidermolysis bullosa have paved the way to a gene therapy approach for the disease. Because gene therapy protocols require preclinical validation in animals, we have characterized spontaneous animal models of junctional epidermolysis bullosa. In this study we have elucidated the genetic basis of the hereditary junctional mechanobullous disease in the Belgian horse, a condition characterized by blistering of the skin and mouth epithelia, and exungulation (loss of the hoof). Immunofluorescence analysis associated the condition to the absent expression of the gamma2 chain of laminin 5 and designated Lamc2 as the candidate gene.

Comparative analysis of the nucleotide sequence of the full-length gamma2 cDNA isolated by reverse transcription polymerase chain reaction amplification of total RNA purified from the epithelium of a junctional epidermolysis bullosa foal and a healthy control disclosed a homozygous basepair insertion (1368insC) in the affected animal. Mutation 1368insC results in a downstream premature termination codon and is predicted to cause absent expression of the laminin gamma2 polypeptide. Our results also show that: (i) the horse junctional epidermolysis bullosa genetically corresponds to the severe Herlitz form of junctional epidermolysis bullosa in man; (ii) the amino acid sequence and structure of the horse laminin gamma2 chain are virtually identical to the human counterpart; (iii) the moderate eruption of skin blisters in the affected animals with respect to the human Herlitz junctional epidermolysis bullosa patients correlates with the protection provided by hair. Our observations suggest that the affected foals are a convenient source of epithelial cells from tissues that cannot be obtained from human junctional epidermolysis bullosa patients, and imply that hairless strains of animals with recessive skin disorders would be the best models for in vivo gene therapy approaches to skin blistering diseases.

Descriptors-Author Keywords: epitheliogenesis imperfecta ; genodermatoses ; Lamc2

Identifiers-KeyWord Plus(R): DYSTROPHIC EPIDERMOLYSIS-BULLOSA; CORRECTIVE GENE-TRANSFER; GAMMA-2 CHAIN; BRANCHING MORPHOGENESIS; MONOCLONAL-ANTIBODY; EPITHELIAL-CELLS; VII COLLAGEN; LAMB3 GENE; B2 CHAIN; EXPRESSION

Cited References:

ABERDAM D, 1994, V6, P299, NAT GENET

ABERDAM D, 1994, V2, P115, CELL ADHES COMMUN

AMANO S, 2000, V275, P22728, J BIOL CHEM

BERTHELSSEN H, 1935, V48, P285, J COMP PATHOL THER

BRUCKNER-TUDERMA L, 1991, V96, P452, J INVEST DERMATOL

BUTZ H, 1957, V64, P555, DTSCH TIERARZTLICHE
CHAMPLIAUD MF, 1996, V132, P1189, J CELL BIOL
CHOATE KA, 1996, V7, P2247, HUM GENE THER
COOPER DN, 1993, V25, P7, ANN MED
CUI Y, 1995, V9, P423, GENE DEV
DELLAMBRA E, 1998, V9, P1359, HUM GENE THER
FINE JD, 2000, V42, P1051, J AM ACAD DERMATOL
FRAME SR, 1988, V193, P1420, J AM VET MED ASSOC
FREIBERG RA, 1997, V6, P927, HUM MOL GENET
GACHE Y, 1996, V97, P2289, J CLIN INVEST
GAGNOUXPALACIOS L, 2001, V153, P835, J CELL BIOL
GEDDEDAHL T, 1996, P1225, EMERY RIMOINS PRINCI
GHAZIZADEH S, 1999, V6, P1267, GENE THER
GOURREAU JM, 1990, V22, P65, POINT VET
HEINONEN S, 1999, V112, P3641, J CELL SCI
HORMIA M, 1998, V77, P1479, J DENT RES
JOHNSON GC, 1988, V98, P329, J COMP PATHOL
KADOYA Y, 1999, V112, P417, HISTOCHEM CELL BIOL
KALLUNKI P, 1992, V119, P679, J CELL BIOL
KOHN CW, 1989, V21, P297, EQUINE VET J
KUSTER JE, 1997, V8, P673, MAMM GENOME
MARINKOVICH MP, 1992, V267, P17900, J BIOL CHEM
MATSUI C, 1995, V105, P648, J INVEST DERMATOL
MENEGUZZI G, 2000, P97, SKIN GENE THERAPY
NISHIZAWA Y, 1993, V113, P493, J BIOCHEM-TOKYO
PALAZZI X, 2000, V115, P135, J INVEST DERMATOL
ROBBINS PB, 2001, V98, P5193, P NATL ACAD SCI USA
ROUSSELLE P, 1997, V138, P719, J CELL BIOL
RYAN MC, 1999, V145, P1309, J CELL BIOL
SAHLBERG C, 1998, V77, P1589, J DENT RES
SALO S, 1999, V18, P197, MATRIX BIOL
SAMBROOK J, 1989, MOL CLONING LAB MANU
SASAKI T, 2001, V314, P751, J MOL BIOL
SEITZ CS, 1999, V6, P42, GENE THER
SHAPIRO J, 1995, V36, P572, CAN VET J
SHIMIZU H, 1997, V289, P174, ARCH DERMATOL RES
SONNENBERG A, 1987, V262, P10376, J BIOL CHEM
SPIRITO F, 2001, V3, P21, J GENE MED
STAHL S, 1997, V110, P55, J CELL SCI 1
SUGIYAMA S, 1995, V228, P120, EUR J BIOCHEM
THOMPSON JD, 1994, V22, P4673, NUCLEIC ACIDS RES
UITTO J, 2001, V137, P1458, ARCH DERMATOL
VAILLY J, 1994, V219, P209, EUR J BIOCHEM
VAILLY J, 1998, V5, P1322, GENE THER
VIDAL F, 1995, V10, P229, NAT GENET
WOJCIK SM, 2001, V154, P619, J CELL BIOL
ZENT R, 2001, V238, P289, DEV BIOL

15/9/3 (Item 1 from file: 155)

DIALOG(R)File 155: MEDLINE(R)

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10188137 22218275 PMID: 12230513

Animal models for skin blistering conditions: absence of laminin 5 causes hereditary junctional mechanobullous disease in the Belgian horse.

Spirito Flavia; Charlesworth Alexandra; Linder Keith; Ortonne Jean-Paul; Baird John; Meneguzzi Guerrino

INSERM U385, Faculte de Medecine, Nice, France.

Journal of investigative dermatology (United States) Sep 2002, 119

(3) p684-91, ISSN 0022-202X Journal Code: 0426720

Document type: Journal Article

Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

Recent achievements in the genetic correction of keratinocytes isolated from patients with junctional epidermolysis bullosa have paved the way to a gene therapy approach for the disease. Because gene therapy protocols require preclinical validation in animals, we have characterized spontaneous animal models of junctional epidermolysis bullosa. In this study we have elucidated the genetic basis of the hereditary junctional mechanobullous disease in the Belgian horse, a condition characterized by blistering of the skin and mouth epithelia, and exungulation (loss of the hoof). Immunofluorescence analysis associated the condition to the absent expression of the gamma2 chain of laminin 5 and designated Lamc2 as the candidate gene. Comparative analysis of the nucleotide sequence of the full-length gamma2 cDNA isolated by reverse transcription polymerase chain reaction amplification of total RNA purified from the epithelium of a junctional epidermolysis bullosa foal and a healthy control disclosed a homozygous basepair insertion (1368insC) in the affected animal. Mutation 1368insC results in a downstream premature termination codon and is predicted to cause absent expression of the laminin gamma2 polypeptide. Our results also show that: (i) the horse junctional epidermolysis bullosa genetically corresponds to the severe Herlitz form of junctional epidermolysis bullosa in man; (ii) the amino acid sequence and structure of the horse laminin gamma2 chain are virtually identical to the human counterpart; (iii) the moderate eruption of skin blisters in the affected animals with respect to the human Herlitz junctional epidermolysis bullosa patients correlates with the protection provided by hair. Our observations suggest that the affected foals are a convenient source of epithelial cells from tissues that cannot be obtained from human junctional epidermolysis bullosa patients, and imply that hairless strains of animals with recessive skin disorders would be the best models for in vivo gene therapy approaches to skin blistering diseases.

Tags: Animal; Human; Support, Non-U.S. Gov't
Descriptors: *Cell Adhesion Molecules--genetics--GE; *Disease Models, Animal; *Epidermolysis Bullosa, Junctional--genetics--GE; *Epidermolysis Bullosa, Junctional--physiopathology--PP; *Horses; Blister--genetics--GE; Blister--physiopathology--PP; DNA, Complementary, Epithelium--pathology--PA; Genotype; Joints--pathology--PA; Laminin--genetics--GE; Molecular Sequence Data; Pedigree; Point Mutation; Sequence Homology, Amino Acid
CAS Registry No.: 0 (Cell Adhesion Molecules); 0 (DNA, Complementary); 0 (Laminin); 0 (kalinin); 0 (laminin gamma 2)

Record Date Created: 20020916

Record Date Completed: 20021010

? ds

Set	Items	Description
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S2	48128	CYTOSINE
S3	586	1368
S4	0	?1368?
S5	700	1368?
S6	40863	LAMININ
S7	1810	S6 AND (INSERT OR MUTATION OR MUTATED OR INSERTION OR DELETION OR SUBSTITUTION)
S8	700	S3 OR S5
S9	0	S1 AND S8
S10	0	S8 AND S2
S11	37	S7 AND S1
S12	1	S11 AND CYTOSINE
S13	201	LAMC2
S14	0	S13 AND S3

S15 3 S13 AND S5

? s s1 and s2

1899 S1

48128 S2

S16 2 S1 AND S2

? type s16/full/all

16/9/1 (Item 1 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

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08474655 BIOSIS NO.: 199344024655

PCR-based detection of two exonic polymorphisms in the human type VII
collagen gene (COL7A1) at 3p21.1.

AUTHOR: Christiano Angela M(a); Chung-Honet Linda C; Hovnanian Alain; Uitto
Jouni

AUTHOR ADDRESS: (a)Dep. Dermatol., Jefferson Med. College, Thomas Jefferson
University, Philadelphia, Pa. 19107

JOURNAL: Genomics 14 (3):p827-828 1992

ISSN: 0888-7543

DOCUMENT TYPE: Article

RECORD TYPE: Citation

LANGUAGE: English

REGISTRY NUMBERS: 81295-04-7: ALUI; 73-40-5Q: GUANINE; 69257-39-2Q: GUANINE
; 73-24-5: ADENINE; 71-30-7: CYTOSINE; 60-18-4: TYROSINE

DESCRIPTORS:

MAJOR CONCEPTS: Anthropology; Biochemistry and Molecular Biophysics;
Clinical Chemistry (Allied Medical Sciences); Dermatology (Human
Medicine, Medical Sciences); Genetics; Pathology; Population Genetics
(Population Studies)

BIOSYSTEMATIC NAMES: Hominidae-Primates, Mammalia, Vertebrata, Chordata,
Animalia

ORGANISMS: Hominidae (Hominidae)

BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): animals; chordates; humans;
mammals; primates; vertebrates

CHEMICALS & BIOCHEMICALS: ALUI; GUANINE; ADENINE; CYTOSINE;
TYROSINE

GEOGRAPHICAL NAME: USA (North America, Nearctic region)

MISCELLANEOUS TERMS: ALLELIC FREQUENCY; ALUI POLYMORPHISM; CAUCASIAN;
CO-SEGREGATION; COMPLEMENTARY DNA; CYTOSINE TO TYROSINE
TRANSITION; DIAGNOSTIC METHOD; EPIDERMOLYSIS BULLOSA; FINNS; GENE
MAPPING; GENE MARKER; GREEKS; GUANINE TO ADENINE TRANSITION; JAPANESE;
MENDELIAN SEGREGATION; MOLECULAR DIAGNOSTICS; NOTE; POLYMERASE CHAIN
REACTION; PVII POLYMORPHISM; RESTRICTION FRAGMENT LENGTH POLYMORPHISM;
SOUTHERN BLOT

CONCEPT CODES:

03508 Genetics and Cytogenetics-Human

03509 Genetics and Cytogenetics-Population Genetics (1972-)

05000 Physical Anthropology; Ethnobiology

10006 Clinical Biochemistry, General Methods and Applications

10062 Biochemical Studies-Nucleic Acids, Purines and Pyrimidines

10506 Biophysics-Molecular Properties and Macromolecules

12504 Pathology, General and Miscellaneous-Diagnostic

18506 Integumentary System-Pathology

02508 Cytology and Cytochemistry-Human

18004 Bones, Joints, Fasciae, Connective and Adipose Tissue-Physiology
and Biochemistry

BIOSYSTEMATIC CODES:

86215 Hominidae

16/9/2 (Item 1 from file: 34)

11469061 Genuine Article#: 654YK Number of References: 22
Title: A mutation in the LAMC2 gene causes the Herlitz junctional
epidermolysis bullosa (H-JEB) in two French draft horse breeds
Author(s): Milenkovic D; Chaffaux S; Taourit S; Guerin G (REPRINT)
Corporate Source: INRA,Ctr Rech Jouy, Dept Genet Anim, Lab Genet Biochim &
Cytogenet,F-78352 Jouy En Josas/France/ (REPRINT); INRA,Ctr Rech Jouy,
Dept Genet Anim, Lab Genet Biochim & Cytogenet,F-78352 Jouy En
Josas/France/
Journal: GENETICS SELECTION EVOLUTION, 2003, V35, N2 (MAR-APR), P249-256
ISSN: 0999-193X Publication date: 20030300
Publisher: E D P SCIENCES, 7, AVE DU HOGGAR, PARC D ACTIVITES COURTABOEUF,
BP 112, F-91944 LES ULIS CEDEXA, FRANCE
Language: English Document Type: ARTICLE
Geographic Location: France
Journal Subject Category: AGRICULTURE, DAIRY & ANIMAL SCIENCE; GENETICS &
HEREDITY
Abstract: Epidermolysis bullosa (EB) is a heterogeneous group of inherited
diseases characterised by skin blistering and fragility. In humans, one
of the most severe forms of EB known as Herlitz-junctional EB (H-JEB),
is caused by mutations in the laminin 5 genes. EB has been described in
several species, like cattle, sheep, dogs, cats and horses where the
mutation, a cytosine insertion in exon 10 of the LAMC2 gene, was
very recently identified in Belgian horses as the mutation responsible
for JEB. In this study, the same mutation was found to be totally
associated with the JEB phenotype in two French draft horse breeds,
Trait Breton and Trait Comtois. This result provides breeders a
molecular test to better manage their breeding strategies by genetic
counselling.
Descriptors—Author Keywords: horse ; LAMC2 ; epidermolysis bullosa ;
laminin 5
Identifiers—KeyWord Plus(R): MECHANOBULLOUS DISEASE; CLASSIFICATION;
DIAGNOSIS; POSITION
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OLIVRY T, 1999, V36, P616, VET PATHOL
PALAZZI X, 2000, V115, P135, J INVEST DERMATOL
PULKKINEN L, 1999, V18, P29, MATRIX BIOL
SPIRITO F, 2002, V3, P684, J INVEST DERMATOL
TERWILLIGER JD, 1995, V56, P777, AM J HUM GENET

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Set Items Description
S1 1899 "EPIDERMOLYSIS BULLOSA"

S2 48128 CYTOSINE
S3 586 1368
S4 0 ?1368?
S5 700 1368?
S6 40863 LAMININ
S7 1810 S6 AND (INSERT OR MUTATION OR MUTATED OR INSERTION OR DELETION OR SUBSTITUTION)
S8 700 S3 OR S5
S9 0 S1 AND S8
S10 0 S8 AND S2
S11 37 S7 AND S1
S12 1 S11 AND CYTOSINE
S13 201 LAMC2
S14 0 S13 AND S3
S15 3 S13 AND S5
S16 2 S1 AND S2
? s (s3 or s5) and cytosine
586 S3
700 S5
48128 CYTOSINE
S17 0 (S3 OR S5) AND CYTOSINE
? s s2 and s7
48128 S2
1810 S7
S18 6 S2 AND S7
? type s18/full/all

18/9/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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09637237 BIOSIS NO.: 199598092155
A homozygous nonsense mutation in the beta-3 chain gene of
laminin 5 (LAMB3) in Herlitz junctional epidermolysis bullosa.
AUTHOR: Pulkkinen Leena; Christiano Angela M; Gerecke Donald; Wagman D
Wolfe; Burgeson Robert E; Pittelkow Mark R; Uitto Jouni(a)
AUTHOR ADDRESS: (a)Dep. Dermatol., Jefferson Medical College, 233 South
10th Street, Room 450, Philadelphia, PA 191**USA
JOURNAL: Genomics 24 (2):p357-360 1994
ISSN: 0888-7543
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Herlitz junctional epidermolysis bullosa (H-JEB) is a severe
autosomal recessive disorder characterized by blister formation within
the dermal-epidermal basement membrane. Based on immunofluorescence
analysis recognizing laminin 5 epitopes (previously known as
nicein/kalinin), the genes for this lamina lucida protein have been
proposed as candidate genes in H-JEB. In this study, we examined the gene
encoding the beta-3 polypeptide chain of laminin 5 (LAMB3) by
Northern hybridization and RT-PCR analysis of keratinocyte mRNA from a
proband in a family with H-JEB. Northern analysis revealed markedly
reduced levels of the laminin beta-3 chain mRNA. Amplification of
mRNA by RT-PCR, followed by direct nucleotide sequencing, revealed a
homozygous C-to-T transition resulting in a premature termination codon
(CGA ftdarw TGA) on both alleles. This mutation was verified at the
genomic DNA level, and both parents were shown to be heterozygous
carriers of the same mutation. This is the first description of a
mutation in the laminin beta-3 chain gene (LAMB3) of
laminin 5 in an H-JEB patient.

DESCRIPTORS:

MAJOR CONCEPTS: Biochemistry and Molecular Biophysics; Cell Biology; Dermatology (Human Medicine, Medical Sciences); Development; Genetics; Membranes (Cell Biology)

BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia

ORGANISMS: human (Hominidae)

BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): animals; chordates; humans; mammals; primates; vertebrates

MISCELLANEOUS TERMS: AUTOSOMAL RECESSIVE DISORDER; BASEMENT MEMBRANE; BETA-3 CHAIN; CYTOSINE-TO-THYMINE TRANSITION; KERATINOCYTE MESSENGER RNA; LAMINA LUCIDA PROTEIN

CONCEPT CODES:

02508 Cytology and Cytochemistry-Human

03508 Genetics and Cytogenetics-Human

10062 Biochemical Studies-Nucleic Acids, Purines and Pyrimidines

10064 Biochemical Studies-Proteins, Peptides and Amino Acids

10508 Biophysics-Membrane Phenomena

18506 Integumentary System-Pathology

25552 Developmental Biology-Embryology-Descriptive Teratology and Teratogenesis

BIOSYSTEMATIC CODES:

86215 Hominidae

18/9/2 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

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11469061 Genuine Article#: 654YK Number of References: 22

Title: A mutation in the LAMC2 gene causes the Herlitz junctional epidermolysis bullosa (H-JEB) in two French draft horse breeds

Author(s): Milenkovic D, Chaffaux S; Taourit S; Guerin G (REPRINT)

Corporate Source: INRA,Ctr Rech Jouy, Dept Genet Anim, Lab Genet Biochim & Cytogenet,F-78352 Jouy En Josas/France/ (REPRINT); INRA,Ctr Rech Jouy, Dept Genet Anim, Lab Genet Biochim & Cytogenet,F-78352 Jouy En Josas/France/

Journal: GENETICS SELECTION EVOLUTION, 2003, V35, N2 (MAR-APR), P249-256

ISSN: 0999-193X Publication date: 20030300

Publisher: E D P SCIENCES, 7, AVE DU HOGGAR, PARC D ACTIVITES COURTABOEUF, BP 112, F-91944 LES ULIS CEDEXA, FRANCE

Language: English Document Type: ARTICLE

Geographic Location: France

Journal Subject Category: AGRICULTURE, DAIRY & ANIMAL SCIENCE; GENETICS & HEREDITY

Abstract: Epidermolysis bullosa (EB) is a heterogeneous group of inherited diseases characterised by skin blistering and fragility. In humans, one of the most severe forms of EB known as Herlitz-junctional EB (H-JEB), is caused by mutations in the laminin 5 genes. EB has been described in several species, like cattle, sheep, dogs, cats and horses where the mutation, a cytosine insertion in exon 10 of the LAMC2 gene, was very recently identified in Belgian horses as the mutation responsible for JEB. In this study, the same mutation was found to be totally associated with the JEB phenotype in two French draft horse breeds, Trait Breton and Trait Comtois. This result provides breeders a molecular test to better manage their breeding strategies by genetic counselling.

Descriptors--Author Keywords: horse ; LAMC2 ; epidermolysis bullosa ; laminin 5

Identifiers--KeyWord Plus(R): MECHANOBULLOUS DISEASE; CLASSIFICATION; DIAGNOSIS; POSITION

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CROWELL WA, 1976, V168, P56, J AM VET MED ASSOC
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SPIRITO F, 2002, V3, P684, J INVEST DERMATOL
TERWILLIGER JD, 1995, V56, P777, AM J HUM GENET

18/9/3 (Item 2 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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05982782 Genuine Article#: XM195 Number of References: 34
Title: Predominance of the recurrent mutation R635X in the LAMB3 gene
in European patients with Herlitz junctional epidermolysis bullosa has
implications for mutation detection strategy
Author(s): Pulkkinen L; Meneguzzi G; McGrath JA; Xu Y; BlanchetBardon C;
Ortonne JP; Christiano AM; Uitto J (REPRINT)
Corporate Source: THOMAS JEFFERSON UNIV, JEFFERSON MED COLL, DEPT DERMATOL &
CUTANEOUS BIOL, 233 S 10TH ST/PHILADELPHIA/PA/19107 (REPRINT); THOMAS
JEFFERSON UNIV, JEFFERSON MED COLL, DEPT DERMATOL & CUTANEOUS
BIOL/PHILADELPHIA/PA/19107; KUOPIO UNIV HOSP, DIV DIAGNOST SERV,
CHROMOSOME & DNA LAB/SF-70210 KUOPIO//FINLAND/; THOMAS JEFFERSON
UNIV, JEFFERSON MED COLL, DEPT BIOCHEM & MOL
PHARMACOL/PHILADELPHIA/PA/19107; THOMAS JEFFERSON UNIV, JEFFERSON INST
MOL MED, MOL DERMATOL SECT/PHILADELPHIA/PA/19107; UNIV NICE, FAC MED,
INSERM, U385/NICE//FRANCE/; HOP ST LOUIS, CLIN MALAD
CUTANEEES/PARIS//FRANCE/; HOP ST LOUIS, UNITE RECH DIAGNOST ANTENATAL
DERMATOL/PARIS//FRANCE/
Journal: JOURNAL OF INVESTIGATIVE DERMATOLOGY, 1997, V109, N2 (AUG), P
232-237
ISSN: 0022-202X Publication date: 19970800
Publisher: BLACKWELL SCIENCE INC, 350 MAIN ST, MALDEN, MA 02148
Language: English Document Type: ARTICLE
Geographic Location: USA; FINLAND; FRANCE
Subfile: CC LIFE-Current Contents, Life Sciences; CC CLIN-Current
Contents, Clinical Medicine
Journal Subject Category: DERMATOLOGY & VENEREAL DISEASES
Abstract: Junctional forms of epidermolysis bullosa (JEB) are characterized
by tissue separation at the level of the lamina lucida. We have
recently disclosed specific mutations in the LAMA3, LAMB3, and LAMC2
genes encoding the subunit polypeptides of the anchoring filament
protein laminin 5 in 66 families with different variants of JEB.
Examination of the JEB mutation database revealed recurrence of a
particular C->T substitution at nucleotide position 1903 (exon
14) of LAMB3, resulting in the mutation R635X. The inheritance of

this nonsense mutation was noted on different genetic backgrounds, suggesting that R635X is a hotspot mutation. In this study, we have performed mutation evaluation in a European cohort of 14 families with the lethal, Herlitz type of JEB (H-JEB). The families were first screened for the presence of the R635X mutation by restriction enzyme digestion of the PCR product corresponding to exon 14. Four of the probands were found to be homozygous and six were heterozygous for R635X. The remaining alleles were subjected to mutation screening by PCR amplification of individual exons of LAMB3 and LAMC2, followed by heteroduplex analysis and nucleotide sequencing. In three families (six alleles), mutations in LAMC2 were disclosed. In the remaining eight alleles, additional pathogenetic LAMB3 mutations were found. None of the patients had LAMA3 mutation. Thus, LAMB3 mutations accounted for 22 of 28 JEB alleles (79%), and a total of 14 of 22 LAMB3 alleles (64%) harbored the R635X mutation, signifying its prevalence as a predominant genetic lesion underlying H-JEB in this European cohort of patients. This recurrent mutation will facilitate screening of additional JEB patients for the purpose of prenatal testing of fetuses at risk for recurrence.

Descriptors—Author Keywords: basement membrane zone ; laminin 5 mutations

Identifiers—KeyWord Plus(R): HOMOZYGOUS NONSENSE MUTATION; BETA-3 CHAIN GENE; LAMININ-5 LAMB3; VII COLLAGEN

Research Fronts: 95-0068 002 (DYSTROPHIN GENE; SARCOGLYCAN COMPLEX; MDX MUSCLE)

95-0857 001 (AORTIC DISSECTION; TRANSESOPHAGEAL ECHOCARDIOGRAPHY; NEONATAL MARFAN-SYNDROME)

95-4533 001 (P53 GENE; SPONTANEOUS HPRT MUTATIONS; CPG CYTOSINE METHYLATION; HOMOZYGOUS FAMILIAL HYPERCHOLESTEROLEMIA; BASE EXCISION-REPAIR; HPAII METHYLTRANSFERASE)

95-5061 001 (STRUCTURAL GENE; GLTC-DEPENDENT REGULATION OF BACILLUS-SUBTILIS GLUTAMATE SYNTHASE EXPRESSION; ARABIDOPSIS TYPE-1 PROTEIN PHOSPHATASE)

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18/9/4 (Item 3 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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05827852 Genuine Article#: XA243 Number of References: 12
Title: A recurrent laminin 5 mutation in British patients with
lethal (Herlitz) junctional epidermolysis bullosa: Evidence for a
mutational hotspot rather than propagation of an ancestral allele
Author(s): Ashton GHS; Mellerio JE; Dunnill MGS; Pulkkinen L; Christiano AM
; Uitto J; Eady RAJ; McGrath JA (REPRINT)
Corporate Source: UNITED MED & DENT SCH GUYS & ST THOMAS HOSP, ST THOMAS
HOSP, LAMBETH PALACE RD/LONDON SE1 7EH/ENGLAND/ (REPRINT); UNITED MED
& DENT SCH, ST THOMAS HOSP, ST JOHNS INST DERMATOL/LONDON SE1
7EH/ENGLAND/; THOMAS JEFFERSON UNIV, JEFFERSON MED COLL, DEPT DERMATOL
& CUTANEOUS BIOL/PHILADELPHIA/PA/19107; COLUMBIA UNIV, DEPT
DERMATOL/NEW YORK/NY/
Journal: BRITISH JOURNAL OF DERMATOLOGY, 1997, V136, N5 (MAY), P674-677
ISSN: 0007-0963 Publication date: 19970500
Publisher: BLACKWELL SCIENCE LTD, OSNEY MEAD, OXFORD, OXON, ENGLAND OX2 0EL
Language: English Document Type: ARTICLE
Geographic Location: ENGLAND; USA
Subfile: CC LIFE--Current Contents, Life Sciences; CC CLIN--Current
Contents, Clinical Medicine;
Journal Subject Category: DERMATOLOGY & VENEREAL DISEASES
Abstract: The three genes (LAMA3, LAMB3 and LAMC2) that encode the
anchoring filament protein, laminin 5, may all harbour
pathogenetic mutations in the autosomal recessive blistering skin
disorder, junctional epidermolysis bullosa (JEB). Recently, one
particular mutation, R635X in the LAMB3 gene, has been found to
account for approximately 40% of all JEB laminin 5 mutations
(Kivirikko et al., Hum Mol Genet 1996; 5: 231-7). In this study, we
assessed the frequency of this mutation in 12 British patients
with lethal (Herlitz) JEB using PCR amplification of genomic DNA and
restriction endonuclease digestion. The mutation R635X was found
in seven of 24 (29%) mutant alleles, confirming its relative frequency
within the British gene pool. In addition, haplotype analysis using
intragenic polymorphisms showed that the mutation arose on at
least four different haplotype backgrounds, suggesting it represents a
mutational hotspot rather than propagation of a common British
ancestral allele. These findings support the hypermutable nature of
this CpG dinucleotide and have implications in screening for
laminin 5 gene mutations in British and other patients with JEB.
Identifiers--KeyWord Plus(R): DIAGNOSIS; GENE
Research Fronts: 95-0068 001 (DYSTROPHIN GENE; SARCOPHYCAN COMPLEX; MDX
MUSCLE)
95-4533 001 (P53 GENE; SPONTANEOUS HPRT MUTATIONS; CPG CYTOSINE
METHYLATION; HOMOZYGOUS FAMILIAL HYPERCHOLESTEROLEMIA; BASE
EXCISION-REPAIR; HPAII METHYLTRANSFERASE)
95-5061 001 (STRUCTURAL GENE; GLTC-DEPENDENT REGULATION OF
BACILLUS-SUBTILIS GLUTAMATE SYNTHASE EXPRESSION; ARABIDOPSIS TYPE-1
PROTEIN PHOSPHATASE)
Cited References:
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18/9/5 (Item 4 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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05702502 Genuine Article#: WR230 Number of References: 28
Title: Fabry disease: Thirty-five mutations in the alpha-galactosidase A gene in patients with classic and variant phenotypes
Author(s): Eng CM (REPRINT) ; Ashley GA; Burgert TS; Enriquez AL; DSouza M; Desnick RJ
Corporate Source: CUNY MT SINAI SCH MED,DEPT HUMAN GENET, BOX 1498, 1
GUSTAVE LEVY PL/NEW YORK/NY/10029 (REPRINT); CUNY MT SINAI SCH
MED,DEPT PEDIAT/NEW YORK/NY/10029
Journal: MOLECULAR MEDICINE, 1997, V3, N3 (MAR), P174-182
ISSN: 1076-1551 Publication date: 19970300
Publisher: SPRINGER VERLAG, 175 FIFTH AVE, NEW YORK, NY 10010
Language: English Document Type: ARTICLE
Geographic Location: USA
Subfile: CC LIFE--Current Contents, Life Sciences; CC CLIN--Current
Contents, Clinical Medicine
Journal Subject Category: BIOCHEMISTRY & MOLECULAR BIOLOGY; MEDICINE,
RESEARCH & EXPERIMENTAL; CELL BIOLOGY
Abstract: Background: Fabry disease, an X-linked inborn error of glycosphingolipid catabolism, results from mutations in the alpha-galactosidase A (alpha-Gal A) gene located at Xq22.1. To determine the nature and frequency of the molecular lesions causing the classical and milder variant Fabry phenotypes and for precise carrier detection, the alpha-Gal A lesions in 42 unrelated Fabry hemizygotes were determined. Materials and

Methods: Genomic DNA was isolated from affected probands and their family members. The seven alpha-galactosidase A exons and flanking intronic sequences were PCR amplified and the nucleotide sequence was determined by solid-phase direct sequencing.

Results: Two patients with the mild cardiac phenotype had missense mutations, I91T and F113L, respectively. In 38 classically affected patients, 33 new mutations were identified including 20 missense (MIT A31V, H46R, Y86C, L89P, D92Y, C94Y, A97V, R100T, Y134S, G138R, A143T, S148R, G163V, D170V, C202Y, Y216D, N263S, W287C, and N298S), two nonsense (Q386X, W399X), one splice site mutation (IVS4 + 2T → C), and eight small exonic insertions or deletions (304del1, 613del9, 777del1, 1057del2, 1074del2, 1077del1, 1212del3, and 1094ins1), which identified exon 7 as a region prone to gene rearrangements. In addition, two unique complex rearrangements consisting of contiguous small insertions and deletions were found in exons 1 and 2 causing L45R/H46S and L120X, respectively.

Conclusions: These studies further define the heterogeneity of mutations causing Fabry disease, permit precise carrier identification and prenatal diagnosis in these families, and facilitate the

identification of candidates for enzyme replacement therapy.

Identifiers-KeyWord Plus(R): A-GENE; NUCLEOTIDE-SEQUENCE; ATYPICAL VARIANT; ALPORT SYNDROME; IDENTIFICATION; CDNA; REARRANGEMENTS; HEMIZYGOTES; MUTAGENESIS; EXPRESSION

Research Fronts: 95-1418 002 (TYPE-IV COLLAGEN ALPHA-5 CHAIN GENE (COL4A5); AUTOSOMAL RECESSIVE ALPORT SYNDROME; RENAL GLOMERULUS OF MICE LACKING S-LAMININ LAMININ BETA-2)

95-0369 001 (PLECKSTRIN HOMOLOGY DOMAINS; HETEROTRIMERIC G-PROTEINS; CLONED PLANT K+ CHANNEL IN XENOPUS OOCYTES; X-LINKED AGAMMAGLOBULINEMIA; CELLULAR EXPRESSION)

95-4533 001 (P53 GENE; SPONTANEOUS HPRT MUTATIONS; CPG CYTOSINE METHYLATION; HOMOZYGOUS FAMILIAL HYPERCHOLESTEROLEMIA; BASE EXCISION-REPAIR; HPAII METHYLTRANSFERASE)

95-5061 001 (STRUCTURAL GENE; GLTC-DEPENDENT REGULATION OF BACILLUS-SUBTILIS GLUTAMATE SYNTHASE EXPRESSION; ARABIDOPSIS TYPE-1 PROTEIN PHOSPHATASE)

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A mutation in the LAMC2 gene causes the Herlitz junctional epidermolysis bullosa (H-JEB) in two French draft horse breeds.

Milenkovic Dragan; Chaffaux Stephane; Taourit Sead; Guerin Gerard
Laboratoire de genetique biochimique et de cytogenetique, Departement de genetique animale, Institut national de la recherche agronomique, Centre de recherches de Jouy, 78352 Jouy-en-Josas Cedex, France.

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Epidermolysis bullosa (EB) is a heterogeneous group of inherited diseases characterised by skin blistering and fragility. In humans, one of the most severe forms of EB known as Herlitz-junctional EB (H-JEB), is caused by mutations in the laminin 5 genes. EB has been described in several species, like cattle, sheep, dogs, cats and horses where the mutation, a cytosine insertion in exon 10 of the LAMC2 gene, was very recently identified in Belgian horses as the mutation responsible for JEB. In this study, the same mutation was found to be totally associated with the JEB phenotype in two French draft horse breeds, Trait Breton and Trait Comtois. This result provides breeders a molecular test to better manage their breeding strategies by genetic counselling.

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Set Items Description

S1 1899 "EPIDERMOLYSIS BULLOSA"

S2 48128 CYTOSINE

S3 586 1368

S4 0 ?1368?

S5 700 1368?

S6 40863 LAMININ

S7 1810 S6 AND (INSERT OR MUTATION OR MUTATED OR INSERTION OR DELETION OR SUBSTITUTION)

S8 700 S3 OR S5

S9 0 S1 AND S8

S10 0 S8 AND S2

S11 37 S7 AND S1

S12 1 S11 AND CYTOSINE

S13 201 LAMC2

S14 0 S13 AND S3

S15 3 S13 AND S5

S16 2 S1 AND S2

S17 0 (S3 OR S5) AND CYTOSINE

S18 6 S2 AND S7